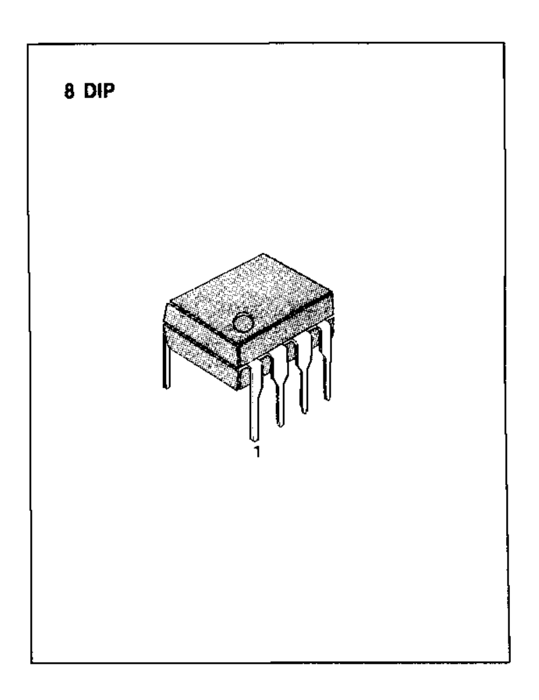
DUAL LOW VOLTAGE POWER AMPLIFIER

The KA2209 is a monolithic integrated audio amplifier in a 8-pin plastic dual in line package. It is designed for portable cassette players and radios.



FEATURES

- **Wide operating supply voltage: V_{CC}=1.8V ~ 9V**
- **Low crossover distortion**
- **Low quiescent circuit current**
- **Bridge/stereo configuration**

ORDERING INFORMATION

Device	Package	Operating Temperature
KA2209	8 DIP	−20°C ~ +70°C

BLOCK DIAGRAM

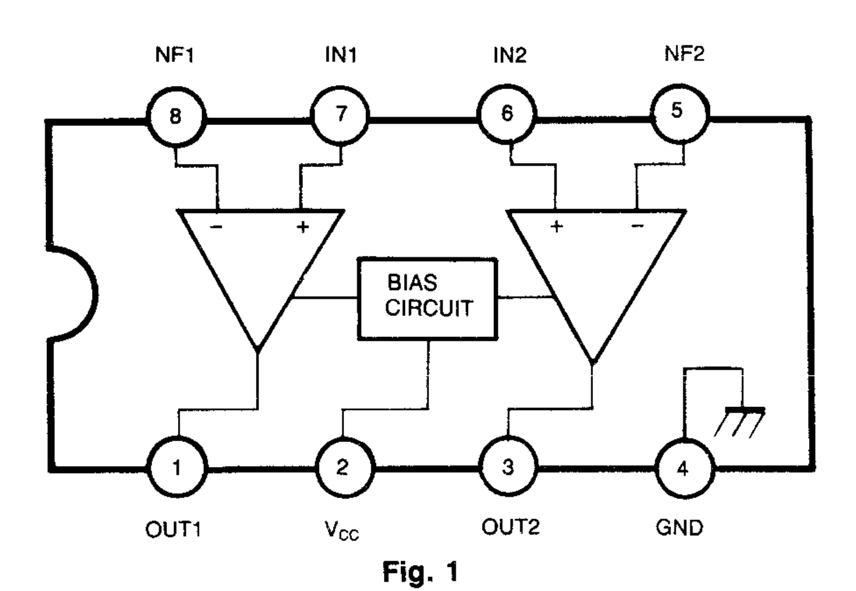


Fig. 1

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Supply Voltage	V_{CC}	15	V
Output Peak Current	I_{PK}	1	A
Power Dissipation	P_D	at T_{AMB}=50°C 1.0 at T_{CASE}=50°C 1.4	W
Operating Temperature	T_{OPR}	−20 ~ +70	°C
Storage Temperature	T_{STG}	−40 ~ +150	°C

ELECTRICAL CHARACTERISTICS

(T_a=25°C, V_{CC}=6V, f=1KHz, unless otherwise specified)

Characteristic	Symbol	Test Conditions		Min	Typ	Max	Unit
Operating Voltage	V_{CC}			1.8		9	V
Quiescent Circuit Current	I_{CCQ}	V_I=0			9		mA
Closed Loop Voltage Gain	G_{VC}	Stereo			40		dB
		Bridge			40		dB
Channel Balance	CB	Stereo		−1	0	1	dB
Output Power	P_O	Stereo	V_{CC}=6V, R_L=4Ω, THD=10%	0.4	0.65		W
			V_{CC}=3V, R_L=4Ω, THD=10%		0.11		W
		Bridge	V_{CC}=6V, R_L=8Ω, THD=10%	0.9	1.35		W
			V_{CC}=3V, R_L=4Ω, THD=10%		0.35		W
Total Harmonic Distortion	THD	Stereo, R_L=8Ω, P_O=0.2W			0.5		%
		Bridge, R_L=8Ω, P_o=0.5W			0.5		%
Ripple Rejection Ratio	RR	Stereo, f=100Hz, C_3=100μF		24	30		dB
Output Noise Voltage	V_{NO}	Stereo, BW(−3dB)=20Hz~20KHz			0.5	2.0	mV
Cross Talk	CT	Stereo, f=1KHz			50		dB
Input Resistance	R_I			100			KΩ

APPLICATION CIRCUIT

1. STEREO

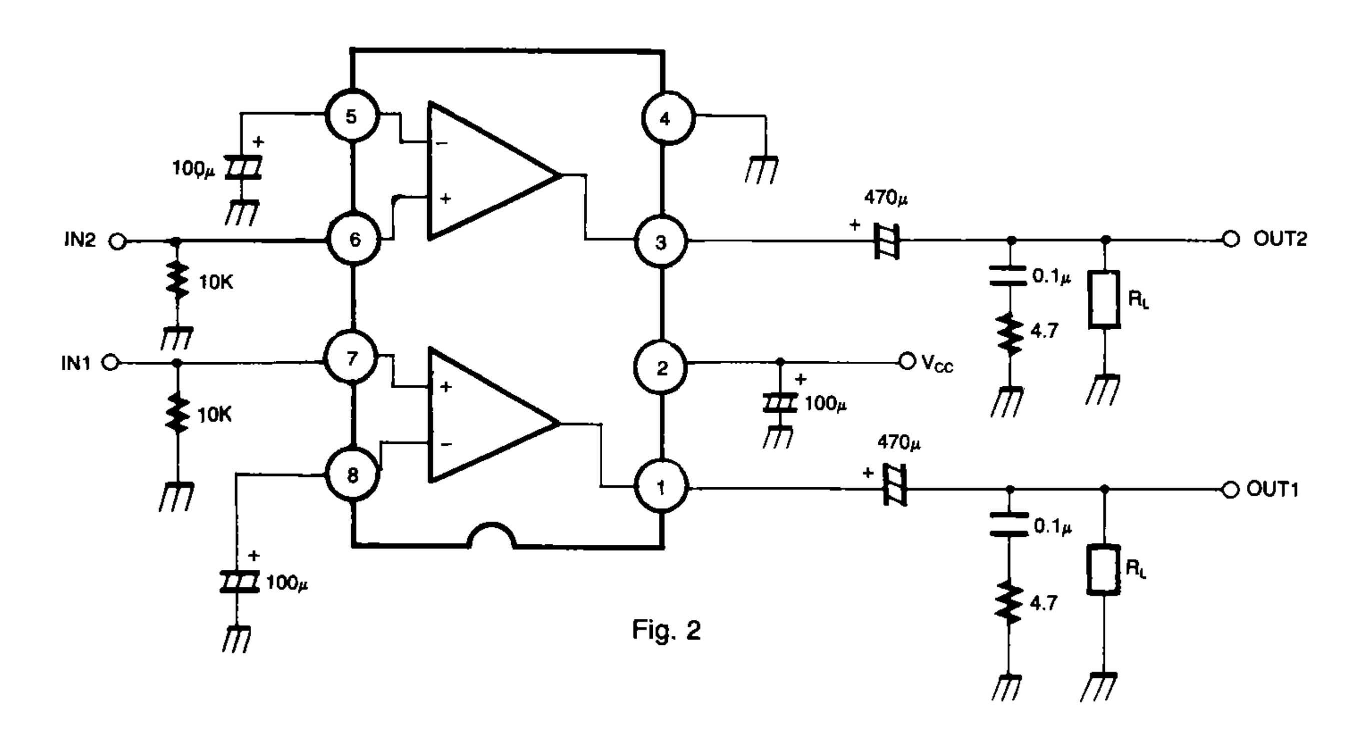


Fig. 2

2. BRIDGE

0.01µ
10µ
INPUT
10K
5
6
7
8
4
3
2
1
V_{CC}
100µ
0.1µ
4.7
R_L
0.1µ
4.7

Fig. 3